

STATUS OF CLAIMS AND SUPPORT FOR CLAIM CHANGES

Status of Claims

Claims 1 and 66 are amended.

Claims 2-14 are pending.

Claims 15-65 and 67-83 are canceled.

Support for Claim Changes

Support for language added to the claims may be found in the original patent, *inter alia*, at the locations indicated in the following marked up copies of the amended claims:

1. (amended) A ~~modified~~ concentric spectrograph comprising:

- a grating, an optical axis, a meridian plane; and a grooved (column 1, lines 23-25) concave surface, said meridian plane containing the grating optical axis, extending perpendicularly to the parallel grooves (column 1, lines 32-34) and having a first and second sides, the first side being a volume residing above the meridian plane and a the second side being a volume residing below the meridian plane (column 1, line 25);
- a lens having a substantially planar surface, a convex surface, and an optical axis, wherein said lens convex surface ~~is facing~~ faces said grating concave surface; and said optical axes of said grating and said lens being are substantially coaxial or parallel (column 10, lines 39-40);
- an ~~primary~~ entrance port ~~being~~ located ~~substantially~~ out of said meridian plane toward on said first side so that incident light is introduced to the lens at a

location out of said meridian plane and on said first side (column 10, lines 32-34

and Figure 9, especially reference 250); and

an ~~primary~~ exit port ~~being~~ located ~~substantially~~ out of said meridian plane toward
on said second side for receiving an one order of diffracted light ~~that maximizes~~
~~throughput and minimizes astigmatism~~ without significant mixing with adjacent
orders of diffracted light (column 5, lines 11-13 and column 9, lines 57-59).

66. (amended) A method for dispersing light comprising:

passing polychromatic light through an entrance port located substantially
on a first side of and at a perpendicular distance from a meridian plane of
a concave diffraction grating;

directing said polychromatic light with a lens toward said grating so that
said light is incident on said grating at least at said meridian plane;
diffracting said light with said diffraction grating, thereby dispersing
said light; and

imaging said dispersed light with said lens at an exit port located
substantially on a second side of said meridian plane for receiving an one
order of light ~~that maximizes throughput and minimizes astigmatism~~ without
significant mixing with adjacent orders of diffracted light (column 5, lines 11-13 and
column 9, lines 57-59).